US Serial No.: 09/830,306

IN THE CLAIMS:

While no amendments are being made to the claims, as a courtesy to the Examiner a complete set of claims as presently pending is reproduced below.

1. (previously presented) A method of mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location;
the method comprising the steps of:
identifying a group comprising one or more of said vectors which have undergone a transmission error; and
replacing one or more speech recognition parameters in the identified group of vectors, wherein said one or more speech recognition parameters in said identified group of vectors are replaced by respective replacement parameters corresponding to one or more speech recognition parameters from a vector without error received after said identified group of vectors.

2. (canceled)

3. (previously presented) A method of mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location;
the method comprising the steps of:
identifying a group comprising one or more of said vectors which have undergone a transmission error; and
replacing one or more speech recognition parameters in the identified group of vectors, wherein all the speech recognition parameters of each vector of said group are replaced by replacing the whole vectors, and each respective replaced whole vector is replaced by a copy of whichever of the preceding or following vector without error is closest in receipt order to the vector being replaced.

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4. (original) A method according to claim 3, wherein a mode of transmission and a mode of error detection are such that said identified group comprises a pair of consecutive vectors, such that the first vector of said pair is replaced by the second vector of a preceding vector without error and the second vector of said pair is replaced by the first vector of a following vector without error.

5. (cancelled)

6. (previously presented) A method according to claim 1, wherein determination of which speech recognition parameter or parameters are to be replaced is performed by predicting, from vectors received without error, a predicted value for each speech recognition parameter within said identified group of vectors, and replacing those speech recognition parameters within the identified group of vectors which are outside of a predetermined threshold relative to their respective predicted value.

7. (original) A method according to claim 6, wherein if more than a specified number of speech recognition parameters within said identified group of vectors are outside of their respective predetermined thresholds then all the speech recognition parameters of said identified group of vectors are replaced.

8. (canceled)

9. (previously presented) A method according to claim 6, wherein those speech recognition parameters which are within a predetermined threshold relative to their respective predicted value are compared with a set of reference vectors to find a best match vector from said set of reference vectors, and those speech recognition parameters which are outside of a predetermined threshold relative to their respective predicted value are replaced by corresponding speech recognition parameters from said best match vector.

10. (original) A method according to claim 9, wherein speech recognition parameters from one or more neighbouring vectors are also compared with the set of reference vectors and the best match with respect to a plurality of consecutive reference vectors is chosen.

11. (previously presented) A method according to claim 1, wherein said step of identifying a group comprising one or more of said vectors which have undergone a transmission error includes a step of predicting respective predicted values for said speech recognition

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parameters, determining one or more threshold levels relative to the predicted values, and identifying vector groups as having undergone a transmission error responsive to a weighted analysis of how many speech recognition parameters in a vector group are outside of each of said one or more threshold levels.

12. (previously presented) A method according to claim 1, wherein said step of identifying a group comprising one or more of said vectors which have undergone a transmission error includes a step of determining a difference between corresponding speech recognition parameters from different vectors within a vector group, and identifying a vector group having undergone a transmission error responsive to an analysis of how many of said differences are outside of a predetermined threshold level.

13. (previously presented) An apparatus for mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location;

    the apparatus comprising:

    means for identifying a group comprising one or more of said vectors which have undergone a transmission error; and

    means for replacing one or more speech recognition parameters in the identified group of vectors, wherein said one or more speech recognition parameters in said identified group of vectors are replaced by respective replacement parameters corresponding to one or more speech recognition parameters from a vector without error received after said identified group of vectors.

14. (cancelled)

15. (previously presented) An apparatus for mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location;

    the apparatus comprising:

    means for identifying a group comprising one or more of said vectors which have undergone a transmission error; and

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means for replacing one or more speech recognition parameters in the identified group of
vectors, wherein all the speech recognition parameters of each vector of said group are
replaced by replacing the whole vectors, and each respective replaced whole vector is
replaced by a copy of whichever of the preceding or following vector without error is
closest in receipt order to the vector being replaced.

16. (original) An apparatus according to claim 15, wherein a mode of transmission and a mode
of error detection are such that said identified group comprises a pair of consecutive vectors,
such that the first vector of said pair is replaced by the second vector of a preceding vector
without error and the second vector of said pair is replaced by the first vector of a following
vector without error.

17. (canceled)

18. (previously presented) An apparatus according to claim 13, wherein determination of which
speech recognition parameter or parameters are to be replaced is performed by predicting,
from vectors received without error, a predicted value for each speech recognition parameter
within said identified group of vectors, and replacing those speech recognition parameters
within the identified group of vectors which are outside of a predetermined threshold relative
to their respective predicted value.

19. (original) An apparatus according to claim 18, wherein if more than a specified number of
speech recognition parameters within said identified group of vectors are outside of their
respective predetermined thresholds then all the speech recognition parameters of said
identified group of vectors are replaced.

20. (canceled)

21. (previously presented) An apparatus according to claim 18, wherein those speech recognition
parameters which are within a predetermined threshold relative to their respective predicted
value are compared with a set of reference vectors to find a best match vector from said set
of reference vectors, and those speech recognition parameters which are outside of a
predetermined threshold relative to their respective predicted value are replaced by
corresponding speech recognition parameters from said best match vector.

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22. (original) An apparatus according to claim 21, wherein speech recognition parameters from one or more neighbouring vectors are also compared with the set of reference vectors and the best match with respect to a plurality of consecutive reference vectors is chosen.

23. (previously presented) An apparatus according to claim 13, wherein said means for identifying a group comprising one or more of said vectors which have undergone a transmission error includes means for predicting respective predicted values for said speech recognition parameters, means for determining one or more threshold levels relative to the predicted values, and means for identifying vector groups as having undergone a transmission error responsive to a weighted analysis of how many speech recognition parameters in a vector group are outside of each of said one or more threshold levels.

24. (previously presented) An apparatus according to claim 13, wherein said means for identifying a group comprising one or more of said vectors which have undergone a transmission error includes means for determining a difference between corresponding speech recognition parameters from different vectors within a vector group, and means for identifying a vector group having undergone a transmission error responsive to an analysis of how many of said differences are outside of a predetermined threshold level.

25. (previously presented) An apparatus according to claim 13, wherein said speech recognition parameters are transmitted from said first location to said second location over a radio communications link.

26. (previously presented) A method according to claim 1, wherein said speech recognition parameters are transmitted from said first location to said second location over a radio communications link.

27. (previously presented) A method of mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location, wherein the speech recognition parameters include one or more mel cepstral coefficients;
the method comprising the steps of:
identifying a group comprising one or more of said vectors which have undergone a transmission error; and

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replacing one or more speech recognition parameters in the identified group of vectors.

28. (previously presented) A method according to claim 27, wherein the speech recognition parameters additionally include logarithmic energy.

29. (previously presented) An apparatus for mitigating errors in a distributed speech recognition process, the distributed speech recognition process being one in which speech recognition parameters are arranged in vectors corresponding to sampling time-frames and said speech recognition parameters are received at a second location having been transmitted from a first location, wherein the speech recognition parameters include one or more mel cepstral coefficients;

the apparatus comprising:

means for identifying a group comprising one or more of said vectors which have undergone a transmission error; and

means for replacing one or more speech recognition parameters in the identified group of vectors.

30. (previously presented) An apparatus according to claim 29, wherein the speech recognition parameters additionally include logarithmic energy.